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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,089	08/21/2006	Toshiyuki Masuda	5404/170	4150

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EXAMINER

SZEKELY, PETER A

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

08/21/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/590,089

**Applicant(s)**

MASUDA, TOSHIYUKI

**Examiner**

Peter Szekely

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 8/21/06, 11/9/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. 4,916,013, Sone et al. 3,790,434 or Hawtin et al. 3,614,843, in view of Izutu et al. 4,105,622, Fujimoto et al. 4,806,588, Ohara et al. 5,866,672 or Nakaura et al. 6,291,567.
3. Maeda et al. disclose a polyester based artificial hair of 30-70 denier in claim 1, terephthalic acid and alkylene diols in column 5, lines 44-48 and flame retardants in column 6, lines 9-10. Sone et al. teach artificial hair in claim 1, polyester in claim 3, flame retarding agents in claim 5, polyethylene terephthalate in column 7, lines 60-61 and halogenated phosphates in column 12, lines 13-17. Hawtin et al. recite artificial hair in claim 1, polyethylene terephthalate in column 2, lines 11-18 and flame retardants in Example 2. Izutu et al. divulge polyalkylene terephthalates, isocyanates and brominated epoxy in claim 1 and isocyanate concentrations in claim 2 and different isocyanates in claims 15 and 19. Intrinsic viscosity can be found in column 6, lines 61-64. Fujimoto et al. reveal polyethylene terephthalate an oxazoline compound in claim 1, bis 2-oxazoline in claim 2, fibers in column 1, lines 19-24, intrinsic viscosity in column 2, lines 62-65, oxazoline compounds in column 3, lines 14-41, concentrations in column 4,

lines 33-35 and brominated flame retardants in column 5, lines 10-25. Ohara et al. present polyethylene terephthalate, halogenated flame retardants and carbodiimide in claim 1, fibers in column 1, lines 13-15, intrinsic viscosity in column 3, lines 60-65, brominated styrenes in the paragraph overlapping columns 4 and 5, carbodiimides in column 8, lines 29-67 and concentrations in the Tables. Nakaura et al. display polyester and brominated flame retardants in claim 1, polyethylene terephthalate fibers in column 1, lines 12-14, intrinsic viscosity in column 4, lines 10-15, carbodiimides in column 9, lines 30-61 and methods of manufacturing in column 10, lines 28-40. It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to use the flame retardant fibers of the secondary references in the artificial hair composition of the primary references because of their excellent flame retardance.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (571) 272-1124. The examiner can normally be reached on 6:10 a.m.-4:40 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter Szekely/  
Primary Examiner, Art Unit 1796

/P. S./  
Primary Examiner, Art Unit 1796  
8/18/08